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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
ZEWDU, MELESS NMN	

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2617	

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/744,612	USKELA, SAMI	
	Examiner	Art Unit	
	Meless N. Zewdu	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/12/06*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-13,15,22,23,44 and 46-58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15* is/are allowed.

6)☒ Claim(s) *1-4,7,9-13,44,46,47,50,51 and 53-55* is/are rejected.

7)☒ Claim(s) *6,8,22,23,48,49,52 and 56-58* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment (RCE)

1. This action is in response to the communication filed on 10/12/06.

2. Claims 1-4, 6-13, 15, 22, 23, 44, 46-58 are pending in this action.

3. The missing intervening claims were previously cancelled.

Claim Rejections - 35 USC § 112

Claim 23 is recites the limitation "the confirmation message" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Objections

Claim 15 is objected to because of the following informalities: examiner suggest applicant to insert a comma after the word 'established' on the last paragraph of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4, 7,12, 13, 16-20, 24-28, 32-34, 37-38, 40, 44-47, 50-51 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 5,940,762) in views of Kozdon et al. (Kozdon) (EP 0 695 104 A2) and Acharya et al. (Acharya) (US 5,974,036).

Regarding claim 1: Lee discloses a method for performing handover of a mobile station communicating in a first call via a first network to communication in a second call via a second network (see abstract; figs. 2A-2D; col. 7, lines 19-67), comprising:

Generating a request for handover (abstract; col. 5, lines 49-65; col. 6, lines 33-59).

transferring data communication between the mobile station and the first network from the first call to the second call (see abstract; col. 7, lines 40-67). But, Lee does not explicitly teach about establishing the/a second call between the first network and the mobile station via the second network, as claimed by applicant. However, in a related field of endeavor, Kozdon teaches about a mobile telephone connection transfer technique wherein, upon detecting that signal strength of an active connection has fallen below a predetermined threshold, a mobile handset sends a request to a first mobile telephone system to set up an alternative connection from the first mobile telephone system to the mobile handset through a second mobile telephone system, and wherein the active connection is transferred to the alternate connection/call (see entire document, particularly abstract; col. 4, lines 12-39; col. 9, lines 8-22). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Lee with that of Kozdon for the advantage of transferring an active call/connection from one telephone system to another. But, the above references do not explicitly teach about **the second call being originated by the mobile station** and **the first network transmitting data to the mobile station data indicating an identification for the handover,** as claimed by applicant. However, in a

related field of endeavor, Acharya teaches about a handoff-control technique for inter-switch handoff arrangement (see abstract; col. 4, line 62-col. 5, line 5) wherein a mobile station establishes a second call/path/link with a first network via alternate route and alternate switch (see fig. 4, broken lines and MT, BS1-BS2, SW1-SW2) and wherein the first network transmits data to the mobile station, data indicating an identification for the handover (see 5, line 6-51, particularly lines 23-38). Although the Acharya's reference is within an ATM technology, it provides a teaching in the area of link re-routing that can be utilized to enhance and expand the existing handoff technique. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the above references for the advantage of changing the link or connection path of a mobile station without necessarily changing the originating network (see col. 2, lines 52-59).

Regarding claim 2: Lee teaches a step of releasing the first call after data communication between the mobile station and the first network has been transferred from the first call to the second call (see col. 8, lines 59-62). Terminating a call properly transferred is same as releasing the call.

Regarding claim 4: Lee teaches a method wherein the first network generates the request for handover (see col. 6, lines 33-59).

Regarding claim 7: Lee teaches a method wherein the first network originates the second call (see col. 6, lines 33-59).

As per claim 12: Lee teaches a method wherein the first and second networks are cellular telephone networks (see abstract; col. 4, lines 18-40).

As per claim 13: Lee teaches a method wherein the mobile station is capable of communicating by radio with the first and second networks (see abstract; col. 5, lines 13-30; col. 6, lines 34-59).

As per claim 44: the features of claim 44 are similar to the features of claim 1, except the feature – receive from the first network data indicating an identification of the handover operation, which is taught by Kozdon (see col. 4, lines 2-39). Therefore, claim 44 is rejected on the same ground and motivation as claim 1.

As per claim 46: the feature of claim 46 is similar to the feature of claim 40. Hence, claim 46 is rejected on the same ground and motivation as claim 40.

As per claim 47: the feature of claim 47 is similar to the feature of claim 2. Hence, claim 47 is rejected on the same ground and motivation as claim 2.

As per claim 50: Lee discloses a network element performing handover a mobile station from a first call via first network second network (see figs. 2B-2C, BSCs; summary), the network element forming part first network and being arranged to:

communicate data with the mobile station via the first network in the first call (see col. 2, lines 61-65; col. 3, lines 19-24). The multiple base stations include the first.

determine that a handover is required (see abstract; col. 6, lines 33-59; col. 11, lines 26-52). In the prior art, inter-system handover is made and the requirement for it comes from the movement of the mobile unit.

transmit identification mobile station data indicating of the handover operation (see col. 8, lines 29-58; col. 10, lines 24-57; col. 11, line 27-col. 12, line 65).

Furthermore, it should be noted in the prior art, that handover operation is made because it was identified/indicated and recognized as such by participating entities.

establish the second call with the mobile station from the first call to the second call (see col. 11, lines 27-52; col. 17, lines 56-65).

transfer data communication with the mobile station from the first call to the second call (see abstract; col. 1, lines 5-10; col. 3, lines 51-67; col. 8, lines 1-14). But, Lee does not explicitly teach about establishing the/a second call between the first network and the mobile station via the second network, as claimed by applicant. However, in a related field of endeavor, Kozdon teaches about a mobile telephone connection transfer technique wherein, upon detecting that signal strength of an active connection has fallen below a predetermined threshold, a mobile handset sends a request to a first mobile telephone system to set up an alternative connection from the first mobile telephone system to the mobile handset through a second mobile telephone system, and wherein the active connection is transferred to the alternate connection/call (see entire document, particularly abstract; col. 4, lines 12-39; col. 9, lines 8-22). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Lee with that of Kozdon for the advantage of transferring an active call/connection from one telephone system to another.

As per claim 51: Lee teaches a network element, wherein the network element is arranged to receive from the second network data indicating an identification of the handover operation (see abstract). Lee's system is bi-directional intersystem soft handoff.

As per claim 53: Kozdon teaches a method comprising the second network being a different network from the first network (see abstract).

As per claim 54: the features of claim 53 are similar to the features of claim 1, except claim 53 is directed to means for performing the steps of claim 1. Hence, claim 53 is rejected on the same ground and motivation as claim 1 since the method requires a means to be performed.

As per claim 55: the features of claim 55 are similar to the features of claim 1, except claim 55 is directed to a network/system for performing the method steps of claim 1. Hence, since the system/network is required to perform method steps of claim1, claim 55 is rejected on the same ground and motivation as claim 1.

Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claim 1 above, and further in view of Duran et al. (Duran) (US 6,115,608).

Regarding claim 3: but, Lee does not explicitly teach about a method wherein a mobile station generates a request for handover, as claimed by applicant. However, in a related field of endeavor, -- "Intersystem Handover Method and Apparatus" --, Duran teaches that a mobile station is capable of initiating intersystem handover/handoff (see col. 3, lines 33-53; col. 7, lines 45-51; col. 10, lines 18-67). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Lee with that of Duran for the advantage of the mobile station to monitor/detect and store the signal quality of nearby stations to make a decision as to when and to which BTS to handover.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claim 1 above, and further in view of Byrne et al. (Byrne) (US 5,659,598).

As per claim 9: Lee does not explicitly teach about a method wherein the geographical coverage of the second network is greater than that of the first network, as claimed by applicant. However, in a related field of endeavor, Byrne teaches about a handover procedure from a cordless base station (cordless telephone system) to a mobile radio-telephone system, wherein the second system/network covers greater geographical area than that of the first (see abstract). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee's reference with the teaching of Byrne for the advantage of enabling users to handover from a cordless telephone system (small area) to a mobile radio system (larger area).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claim 1 above, and further in view of Fernandez et al. (Fernandez) (US 2001/0022615 A1).

As per claim 10: but, Lee does not explicitly teach about a method wherein the first network is an IMT-200 network, as claimed by applicant. However, in a related field of endeavor, Fernandez teaches that IMT-2000 is a standard air interface for mobile/wireless radio communication equipment, like cellular (see page 4, paragraph 0042). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to make a wireless/mobile radio equipment/system IMT-2000 air interface enabled since it is a standard to be met by any entity requiring the service provided by the standard.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee as applied to claim 1 above, and further in view of Menich et al. (Menich) (US 6,449,305 B1).

As per claim 11: Lee does not explicitly teach/disclose about a method wherein the second network is a PDC network, as claimed by applicant. However, in a related field of endeavor, Menich teaches about a handoff technique between different networks that include CDMA, AMPS and PDC (see col. 4, line 65-col. 5, line 10). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee's reference with the teaching of Menich for the advantage of providing mobile stations handoff services between networks that employ different protocols (see col. 35-48).

Allowable Subject Matter

Claim 15 is allowed.

The following is an examiner's statement of reasons for allowance:

As per claim 15: claim 15 is directed to the general area of handoff. The prior art of record does not teach or fairly suggest the techniques of handoff as recited in claim 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 6, 8, 22-23, 48-49 and 52, 56-58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 10/12/06 have been fully considered but they are not persuasive. Applicant's arguments and corresponding examiner's responses are provided as shown in the following paragraphs.

Argument I; with regard to the rejected claims, particularly claims 1, 44 and 50, applicant argues by saying there is not disclosure in Acharya's reference (US 5,974,036) that the HO-START message includes data identifying a handover, as claimed by applicant.

Response I: examiner respectfully disagrees with the argument; in that a handover identifying data is obvious from the fact that a handover takes request message is received and handover is performed. In other words, if the handover is not identified as a handover, there will be not handover. So, examiner considers the handover request message as also identifying the handover.

Argument II: Applicant, with regard to claim 1, also argues by saying there is not transmission of the new base station identification in a manner that reads on what is claimed by applicant.

Response II: examiner respectfully disagrees with the argument; in that this argument is based on a feature that was not claimed. There is not mention of there is no mention of **base station identification** in claim 1. Hence, the argument is moot.

Argument III: applicant further argues by saying there is not motivation, as required, in combining Acharya with Lee and Kozdon.

Response III: examiner respectfully disagrees with the argument. Examiner provides the **aspect of teaching** one of ordinary skill can take advantage of from Acharya's reference by sating "Although the Acharya's reference is within an ATM technology, it provides a teaching in the area of link re-routing that can be utilized to enhance and expand the existing handoff technique", including the required motivation stated as "Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to further modify the above references for the advantage of changing the link or connection path of a mobile station without necessarily changing the originating network" which was extracted from Acharya's reference itself (see col. 2, lines 52-59). Hence, the argument is not persuasive.

Argument IV: applicant further argues by asserting "a handover that requires the mobile station to originate a call between the first network and the mobile network via a second network as claimed by applicant, would not be obvious to one or ordinary skill in the art in view of Lee, Kozdon and Acharya.

Response IV: examiner respectfully disagrees with the argument; in that a data call/connection is shown established (originated) between a mobile and the SW1 via SW2. Applicant tends to argue by asserting the data connection in Acharya's reference

is after a handover. The argument is unpersuasive since the claims do not indicate the connection therein before handover.

Applicant mentions that examiner, in response to a previous argument, states that it is Lee, not Kozdon, which discloses the transmission of the identification of the handover operation; and there is no disclosure in Lee to that effect. Examiner concurred with applicant's assertion, in this regard, and apologizes for any inconvenience this may have caused in preparing this response. The issue of **handover identification** hereafter is settled as provided in response I above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Banks-Harold, Marsha can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Meless Zewdu

Examiner

26 October 2006.